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EXAMINER

NGUYEN, QUANG N

ART UNIT PAPER NUMBER

2141

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicant No.

09/778,108

Applicant(s)

DEMELLO ET AL.

Examiner

Quang N. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 92-108 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 92-108 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Detailed Action***

1. This Office Action is in response to the Amendment filed on 03/15/2006. Claims 73-91 have been cancelled. Claims 92-108 have been added as new claims. Claims 92-108 are presented for examination.

***Drawings***

2. The drawings were received on 03/15/2006. These drawings are acceptable.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 92-102 are rejected under 35 U.S.C. 102(e) as being anticipated by Sheynblat et al. (US 6,677,894), hereinafter "Sheynblat".

5. As to claim 92, **Sheynblat** teaches a method for identifying and profiling wireless terminals, comprising the steps of:

extracting continuously over a period of time from a wireless network said network data transmitted from each of the plurality of wireless terminals powered on in the network (*in wireless network environment, whenever a mobile GPS receiver is powered on or initiated to establish communications connection with a particular cell site location, i.e., base station, a particular telephone number, a Web site/server, etc., information about the identify and location of the mobile GPS receiver maybe determined based on the location of the particular base station/cell site that the mobile GPS receiver is connected with*) (**Sheynblat, col. 19, lines 1-14 and col. 20, line 57 – col. 21, line 4**);

determining a location for each of the plurality wireless terminals powered on in the network based on respective extracted said network data (*a position calculation is performed by the GPS location server after receiving pseudo ranges from the mobile GPS receiver through the mobile switching center and the regional SMSC*) (**Sheynblat, col. 15, lines 21-27**);

storing determined locations of each of the plurality of wireless terminals powered on in the network over a period of time (*the base station, the local/region mobile switching center MSC, the Web server or other devices, storing and using the location of the client over a period of time to derive representations, charts, or graphs of cellular use demographics, such as time and place of calls, location-based and/or time-based distributions, etc.*) (**Sheynblat, c l. 21, lines 23-35**);

formulating a location history for each of the plurality of wireless terminals powered on in the network based at least in part on their respective stored locations over the period of time (*the presentations, charts, graphs of cellular use demographics, such as time and place of calls maybe useful for advertising, user profiling, i.e., formulating a location history*) (**Sheynblat, col. 21, lines 23-37**);

providing a predetermined pattern of activity represented by the presence of wireless terminals at or near particular locations at or around particular timeframes (*a system receiving location-based information may use this information to decide if a particular service is allowed at the client's present location/time and/or at location or time of interest*) (**Sheynblat, col. 21, lines 35-44**);

determining each of the plurality of wireless terminals powered on in the network whose location history corresponds to the predetermined pattern of activity (*based on the derived representations/charts/graphs of cellular use demographics, such as time and place of calls, location-based and/or time-based distributions of various mobile GPS users, a system receiving location-based information may use this information to decide if a particular service is allowed at the client's present location/time and/or at location or time of interest*) (**Sheynblat, col. 21, lines 35-44**).

6. As to claim 93, **Sheynblat** teaches the method of claim 92, further comprising the step of isolating the location history and said network data of any of said wireless terminals, which correspond to the predetermined pattern of activity (*in response to receiving information relating to the location of the client based on place and time of log-*

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*on/call in real-time, the Web server provides location-based information to client as mentioned in Table 1 such as traffic, weather, routing information, road maps, etc.) (Sheynblat, Table 1 and col. 21, lines 5-44).*

7. As to claim 94, **Sheynblat** teaches the method of claim 93, further comprising the step of providing a predetermined pattern of activity represented by presence of wireless terminals at or near particular locations at or around particular timeframes, wherein the particular locations and timeframes are unrelated to said particular locations and timeframes in claim 92 *(based on the derived representations/charts/graphs of cellular use demographics, such as time and place of calls, location-based and/or time-based distributions of various mobile GPS users, a system receiving location-based information may use this information to decide if a particular service is allowed at the client's present location/time and/or at location or time of interest, i.e., to provide a predetermined pattern of activity at the client's present location/time and/or at the location or time of interest)* (**Sheynblat, col. 21, lines 35-44**).

8. As to claim 95, **Sheynblat** teaches the method of claim 94, further comprising the step of: at regular time intervals more frequent than the regular time intervals, continuing the steps of extracting, determining, storing, and formulating for any of the plurality of wireless terminals whose position histories were isolated at the isolating step *(the Web server or other device may use the information about the client, such as its location, time of log-on/call, etc., to derive representations/charts/graphs of cellular use*

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*demographics, such as time and place of calls, location-based and time-based distributions, etc., i.e., performing repeatedly over a period of time)* (**Sheynblat, col. 21, lines 23-33**).

9. As to claim 96, **Sheynblat** teaches the method of claim 92, wherein said step of extracting from a wireless network includes extracting said network data generated by voice and data communications (the Web server or other device may use the information about the client, such as its location, time of log-on/call, i.e., voice and data communications, to derive representations/charts/graphs of cellular use demographics, such as time and place of calls, location-based and time-based distributions, etc., i.e., performing repeatedly over a period of time) (**Sheynblat, col. 21, lines 23-33**).

10. As to claim 97, **Sheynblat** teaches the method of claim 92, wherein said step of extracting from a wireless network includes passive monitoring of signaling interfaces of the wireless network to extract said network data *(the client may provide information indicative of its location by entering values to indication the position of the client in response to a request of uploading of GPS-related measurement, data, etc.)* (**Sheynblat, col. 20, lines 1-7 and 57-64**).

11. As to claim 98, **Sheynblat** teaches the method of claim 92, further comprising the step of formulating an alert message to notify of each of the determined plurality of wireless terminals *(depending on the application, the exchange messages between the*

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*mobile GPS unit and the Location Server can be initiated by either entity, for example, an alert message to notify the client about roaming service, text message waiting in inbox, etc.) (Sheynblat, col. 13, lines 4-10).*

12. As to claim 99, **Sheynblat** teaches the method of claim 98, wherein said network data include periodic registration data and periodic RF signals transmitted over the wireless network (*in wireless network environment, whenever a mobile GPS receiver is powered on or initiated to establish communications connection with a particular cell site location, i.e., base station, a particular telephone number, a Web site/server, etc., information about the identify and location of the mobile GPS receiver, i.e., registration data, is determined and used to register/establish communications with the mobile switching center*) (**Sheynblat, col. 19, lines 1-14 and col. 20, line 57 – col. 21, line 4**).

13. As to claims 100-101, **Sheynblat** teaches the method of claim 92, wherein said step of extracting from a wireless network includes extracting from said network data at least the identity of the wireless terminal such as “MIN” and RF signal information (*a mobile unit 72, which is a typically a “location enabled” mobile unit, may provide a mobile identification number “MIN” and pseudoranges “PR” to a base station 704*) (**Sheynblat, col. 21, lines 50-56**).

14. As to claim 102, **Sheynblat** teaches the method of claim 92, wherein said step of determining location is based on using any combination of RF signal information from



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one or more of said network data to approximate geographical position of wireless terminals (*a position calculation is performed by the GPS location server after receiving pseudo ranges from the mobile GPS receiver through the mobile switching center and the regional SMSC, i.e., using a particular cell site location/ID and pseudo ranges*) (Sheynblat, col. 15, lines 21-27 and col. 21, lines 50-56).

### ***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. **Claims 103-104 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sheynblat, in view of Pettovello (US 6,449,621).**

17. As to claim 103, **Sheynblat** teaches the method of claim 92, but does not explicitly teach extracting from a wireless network further includes replacing any of the terminal identifier with an anonymous identifier.

In an analogous art, **Pettovello** teaches a privacy data escrow system and method, wherein an escrow agent 16 creates a universal anonymous identifier for substituting a scrambled person identifier (*i.e., replacing any of the terminal identifier with an anonymous identifier*) and once substituted, all data belonging to a person

stored in the database 20 are identified by or associated with the same unique universal anonymous identifier (*i.e., creating a record of said data associated with said anonymous identifier*) (**Pettovello, col. 3, line 60 – col. 4, line 8**).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of **Sheynblat** and **Pettovello** to include the step of replacing any of the terminal identifier with an anonymous identifier since such methods were conventionally employed in the art to maintain and/or protect the confidentiality of privacy, personal identification data such as name, address, email, telephone number, personal financial/demographic data of the user by generating an anonymous identifier to substitute for the user unique identifier.

18. As to claim 104, **Sheynblat-Pettovello** teaches the method of claim 93, wherein said step of isolating may further include determining identity of the wireless terminal and thereby the owner of the wireless device by converting anonymous identifier to network identifier of the wireless terminal (*once substituted, all data belonging to a person stored in the database 20 are identified by or associated with the same unique universal anonymous identifier, i.e., the identity and owner of the wireless device associated with said anonymous identifier can be determined by looking up the database 20*) (**Pettovello, col. 3, line 60 – col. 4, line 8**).

19. Claims 105-108 are corresponding system claims of method claims 92-104; th refor , they ar reject d under the same rationale.

20. Applicant's arguments as well as request for reconsideration filed on 03/15/2006 have been fully considered but they are moot in view of new ground(s) of rejection.

21. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang N. Nguyen whose telephone number is (571) 272-3886.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's SPE, Rupal Dharia, can be reached at (571) 272-3880. The fax phone number for the organization is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
RUPAL DHARIA  
SUPERVISORY PATENT EXAMINER